

## Adenoma miss rate in optical colonoscopy

Optical colonoscopy (OC) is well-established as the method of choice for detecting colorectal neoplasms. Estimates of its sensitivity, however, have relied on subsequent polyp detection by the same technique. Pickhardt and colleagues have completed the first study of the OC adenoma miss rate using a separate reference standard.

The study was part of a multicenter trial evaluating the performance of three-dimensional virtual colonoscopy (VC). A total of 1,233 asymptomatic adults who had been referred for colorectal cancer screening were subjected to same-day VC and OC. The prospective OC was carried out without knowledge of the VC interpretation. After unblinding of the VC results, a second-look OC was carried out in all cases where polyps had been missed.

Of 511 polyps ( $\geq 5$  mm) detected by second-look OC, 55 (10.8%) were missed by the prospective OC. Second-look OC revealed that 21 of these were adenomatous polyps ( $\geq 6$  mm). Fifteen of the missed neoplasms were non-rectal and the majority of these were located on the backside of a fold. The remaining six missed adenomas were in the rectum, and were within 10 cm of the anal verge in five cases. The OC miss rate for large ( $\geq 10$  mm) adenomas was 12%.

Pickhardt *et al.* conclude that using VC as a reference standard had revealed a higher OC miss rate than had previously been reported. Although OC is a sensitive method for detecting colorectal neoplasia, they note that there are distinct 'blind spots' where important lesions may be missed.

**Original article** Pickhardt PJ *et al.* (2004) Location of adenomas missed by optical colonoscopy. *Ann Intern Med* 141: 352–359

## Advanced refractory prostate cancer: new treatment trial

Men with metastatic, androgen-independent prostate cancer have a median survival of 1 year or less. Current treatment with mitoxantrone plus prednisone or hydrocortisone palliates bone pain in some patients, but no

available therapies prolong survival. Phase I and II studies have shown improved survival in patients receiving docetaxel plus estramustine; Petrylak and colleagues have investigated this in a randomized, phase III trial.

A total of 770 men with metastatic, hormone-independent prostate cancer were prospectively enrolled in the study. Of 674 eligible patients, half were assigned to receive docetaxel plus estramustine and half to receive mitoxantrone plus prednisone. Overall survival was compared in the two treatment groups during a median follow-up of 32 months.

The median overall survival was significantly longer in patients treated with docetaxel plus estramustine compared with those in the mitoxantrone plus prednisone group (17.5 months vs 15.6 months,  $P=0.02$ ). The median time to progression was also significantly longer in the docetaxel plus estramustine group, and post-treatment declines in serum PSA levels of  $\geq 50\%$  were more common in these patients. Pain relief was similar in both treatment groups. Adverse events (grade 3 or 4 neutropenic fevers, nausea and vomiting, and cardiovascular events) were significantly more frequent, however, in the docetaxel plus estramustine group than in the mitoxantrone plus prednisone group.

The authors conclude that docetaxel plus estramustine treatment moderately increased survival in these patients, but that this must be balanced against the increased rate of adverse events.

**Original article** Petrylak DP *et al.* (2004) Docetaxel and estramustine compared with mitoxantrone and prednisone for advanced refractory prostate cancer. *N Engl J Med* 351: 1513–1520

## Treatment of taxane-refractory breast cancer

Improved treatments for taxane-refractory breast cancer are urgently needed. Pegylated liposomal doxorubicin (PLD)—developed to enhance the antitumor activity of doxorubicin while reducing its toxicity—has shown promise in studies of advanced ovarian and breast cancer. This agent has recently been studied in a multicenter, phase III trial.

Women with taxane-refractory breast cancer were randomly assigned to receive PLD